



Department of Environmental Quality, Water Bureau

**PESTICIDE APPLICATION  
TO SURFACE WATERS OF THE STATE OF MICHIGAN**

Permits are required by Part 31, Water Resources Protection, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (NREPA), and Part 33, Aquatic Nuisance Control, of the NREPA (Part 33).

**AQUATIC NUISANCE CONTROL GENERAL PERMIT**

**GENERAL PERMIT NO. ANCG07-96  
AQUATIC NUISANCE CONTROL ACTIVITIES FOR CANALS AND MARINAS  
LOCATED ON THE GREAT LAKES AND CONNECTING WATERS**

Date Effective: February 8, 2007

Date Expires: December 31, 2007

In compliance with the provisions of Part 33 of NREPA, pesticides are authorized to be applied to waters of the state (waterbody) for the control of nuisance aquatic plants and algae in accordance with the requirements and conditions set forth in this general Aquatic Nuisance Control permit (permit).

The applicability of this permit shall be limited to chemical treatment of a waterbody which will not negatively impact human health and will have no more than minimal short-term adverse impacts on the natural resources and environment.

In order to constitute a valid authorization to chemically treat waters of the state, this permit must be complemented by a Certificate of Coverage (COC) issued by the Michigan Department of Environmental Quality (DEQ). The following will be identified in the COC:

- COC number
- date effective / issued
- expiration date
- permittee name and address
- specific waterbody name and location for which authorization to chemically treat is granted

The terms and conditions of this permit shall apply to the permittee for the identified waterbody on the effective date of a COC issued by the DEQ.

The provisions of this permit are severable.

All contact with the DEQ as required by this permit shall be to the DEQ representative identified in the COC, Aquatic Nuisance Control and Remedial Action Unit, Water Bureau, DEQ, located at 525 West Allegan Street, Lansing, Michigan, 48913, telephone 517-241-7734, facsimile 517-335-4381, and/or e-mail: [deq-lwm-anc@michigan.gov](mailto:deq-lwm-anc@michigan.gov).

## **Section A. Qualified Sites**

A canal or marina qualifying for approval to be chemically treated under this permit must meet all of the following criteria:

- an individual canal system or marina facility (commercial or municipal) contiguous to a Great Lake or the connecting waters (Detroit River, Lake St. Clair, St. Clair River or St. Mary's River)
- dredged from uplands or leased state bottomlands enclosed by a breakwater
- minimal to no flow conditions expected within the canal or marina
- has no contiguous wetlands associated with the canal or marina
- is not associated with a designated trout stream
- does not have federal or state endangered, or threatened species pursuant to Part 365 of Act 451, or critical habitat, associated with it
- has been identified by the DEQ and the Department of Natural Resources as having minimal resource value to the state

The current list of approved canals/marinas is available from the DEQ upon request or can be downloaded from the Aquatic Nuisance Control section of the DEQ Web site at <http://www.michigan.gov/deq>.

## **Section B. Authorizations and Coverage Provisions**

### **1. Authorized Areas**

Chemical treatment for control of nuisance aquatic plants and algae is authorized only to waters of the state as defined by this permit, specified by the issued COC, and identified on the treatment map(s) submitted with the application and on file with the DEQ.

Areas where chemical treatment for control of nuisance aquatic plants and algae is undertaken must be either under the legal control of the permittee or the party(ies) who has/have granted the permittee permission to do the treatment.

### **2. Chemical Application**

Follow all label instructions to protect self, others, and the environment.

The applicant may apply only those specific chemical products that are approved by the DEQ. If only an active ingredient is approved in the tables below, consult the list of DEQ-approved aquatic pesticides and related products to determine if the brand name product you wish to use is approved. This list is available from the DEQ upon request.

The application of chemical products to waters of the state is restricted to the following, at the stated maximum application rates:

Category	Active Ingredient	Brand Name : Maximum Application Rate
Algae Control	chelated copper	All Approved Products (unless specified below): 0.6 gal/acre-foot (planktonic/filamentous algae) 1.2 gal.acre-foot (macroalgae) AlgaePro and K-Tea: 0.7 gal/acre-foot (planktonic/filamentous algae) 1.7 gal.acre-foot (macroalgae) Algimycin PWF: 1.06 gal/acre-foot (planktonic/filamentous algae) 2.13 gal/acre-foot (macroalgae) Cutrine Plus Granular: 60 lbs/acre Formula F-30 Algae Control: 2 gal/acre foot
	copper sulfate	All Approved Products (unless specified below): 2.6 lbs/acre-foot (planktonic/filamentous algae) 4.4 lbs/acre-foot (macroalgae) Aqua Solutions and EarthTec: 0.33 gal/acre-foot (planktonic algae) 0.55 gal/acre-foot (filamentous algae/macroalgae)
	endothall	Hydrothol 191: 2.2 pints/acre-foot Hydrothol 191 Granular: 11 lbs/acre-foot
	sodium carbonate peroxyhydrate	GreenClean: 17 lbs/acre-foot (maintenance) 170 lbs/acre-foot (heavy growth) GreenClean PRO: 9 lbs/acre-foot (maintenance) 90 lbs/acre-foot (heavy growth) Pak 27 Algaecide: 16.9 lbs/acre-foot Phycomycin SPC Algaecide & Oxidizer: 16.9 lbs/acre-foot
Submerged Plant Control	2,4-D – granular	All Approved Products: 100 lbs/acre (milfoil), 200 lbs/acre (coontail)
	chelated copper	Copper-EDA Aquatic Herbicide: 3.34 gal/acre-foot Komeen: 3.34 gal/acre-foot Nautique: 3 gal/acre-foot
	diquat dibromide	Reward: 2 gal/acre Reward AccuGel: 1.25 gal/acre-foot
	endothall	Aquathol K: 1.9 gal/acre-foot Aquathol Granular: 81 lbs/acre-foot Aquathol Super K Granular: 13.2 lbs/acre-foot Hydrothol 191 (liquid only): 1 gal/acre
	triclopyr	Renovate 3: 1.4 gal/acre-foot
Emergent Plant Control	2,4-D – granular	All Approved Products: 200 lbs/acre
	glyphosate	All Approved Products: 4 - 6 pints/acre (max rate depends on target species – refer to product label)
	triclopyr	Renovate 3: 2 - 8 quarts/acre (max rate depends on target species – refer to product label)
Adjuvants & Colorants	n/a (adjuvants)	AGRI-DEX: 4 pints/acre Cygnet Plus: 2.5 pints/acre-foot PolyAn: 1 gal/acre-foot TopFilm: 1 pint/acre
	n/a (water dye - tracer rate only)	All Approved Products: 0.01 gal/acre foot (tracer)

### 3. Treatment Intervals

Each chemical approved for use in Section B(2) of this permit has a minimum length of time required between each treatment in the same area(s) of impact, in accordance with the federal product label.

Active Ingredient	Minimum Treatment Interval
2,4-D	14 days minimum between treatments
chelated copper	7 days minimum between treatments (except Komeen and Nautique: 4 weeks minimum; Formula F-30 and Copper-EDA: 10 days minimum)
copper sulfate	7 days minimum between treatments
diquat dibromide	14 days minimum between treatments
endothall	5 days minimum between treatments
glyphosate	24 hours minimum between treatments
sodium carbonate peroxyhydrate	48 hours minimum between treatments
triclopyr	10 days minimum between treatments

### 4. Special Conditions

#### General

The permittee shall not employ a commercial applicator, or any legal entity with whom he/she may be associated as a principal, owner or co-owner, who has a significant history of noncompliance with Part 33 or with permits issued under Part 33, as determined by the DEQ pursuant to Rule 323.3108(3). A list of these aquatic commercial applicators who have a significant history of noncompliance is available from the DEQ upon request. The listed individuals are not prohibited from working as an employee under the direction of another certified applicator.

Upon receipt of written notification from the DEQ, chemical treatment may NOT proceed unless a DEQ representative is present.

Upon receipt of written notification from the DEQ, the permittee must notify the DEQ a minimum of two working days prior to application of chemical(s), for a specified waterbody. Notification must be made to the Aquatic Nuisance Control and Remedial Action Unit at 517-241-7734 between 8:00 a.m. and 5:00 p.m., Monday through Friday. Notification must include the date, time, and locations of the proposed chemical use.

For a permittee who is a licensed commercial pesticide applicator, and who does not have a DEQ approved Emergency Notification Procedure on file with the Aquatic Nuisance Control and Remedial Action Unit, an accurate map or written description of the exact locations where each herbicide was applied must be submitted to the DEQ within 24 hours of the completion of each treatment. The map or description must be faxed to the DEQ at 517-335-4381. Notification is not required for copper product or water dye treatments.

#### Outlet Flow

Do not damage aquatic vegetation inside the canal or marina within **50** feet of the outlet to the Great Lake or connecting water.

Specific Products*2,4-D and Endothall*

Do not apply granular endothall or granular 2,4-D products within 75 feet of ANY active drinking water well OR within 250 feet of wells less than 30 feet deep. Distances are measured from the well location not from the shoreline. Wells and isolation distances are not necessarily shown on the treatment map. Prior to treatment, locate the water wells and observe the appropriate isolation requirements. If well location and/or depth are unknown, then assume the full 250-foot isolation distance.

The permittee must notify the DEQ of all 2,4-D treatments if the permittee has been notified by the DEQ, in writing, that the permitted treatment is located within a Wellhead Protection Area. The permittee shall provide the DEQ with an accurate map of the exact locations where 2,4-D was applied within 24 hours of the completion of EACH treatment. The map (including permit number and date of treatment) must be faxed to the DEQ at 517-335-4381 (attention: Matt Preisser). This notification is required for 2,4-D treatments only.

*Colorants*

The use of water dyes allowed by this permit excludes water dyes that are labeled as herbicides (e.g., Aquashade, Admiral, Pond Care Algae Blocker).

*Copper Sulfate / Chelated Copper*

Planktonic/filamentous algae treatments using copper sulfate and/or chelated copper products shall not exceed a total copper ion concentration of 0.25 parts per million (ppm). Combining multiple copper products as approved by this permit may result in exceeding this limit -- refer to the product labels for application rates necessary to avoid exceeding 0.25 ppm copper.

Treatment of wild celery (*Vallisneria americana*) with a chelated copper herbicide product (Komeen, Nautique) may occur no more than two times per year.

*Diquat Dibromide*

The Reward products are listed on the Michigan Department of Agriculture's restricted use pesticide list. You must be a certified applicator to use these products in any of the canals/marinas approved under this permit.

**5. Notification and Posting Requirements**

The applicant is required to notify, in writing, an owner of any waterfront property within 100 feet of the area of impact, not less than seven days, and not more than 45 days, before the initial chemical treatment. Requirements for written notification are provided in Section 324.3310(h) of Part 33. If the owner is not the occupant of the waterfront property or the dwelling located on the property, then the owner is responsible for notifying the occupant.

Notice of the chemical application must be posted prior to each chemical application, in accordance with Section 324.3310(d) of Part 33. Water use restrictions listed on the label for the specific product (i.e., trade name) used shall be included on the posting sign. In addition, a 24-hour water use restriction for swimming shall be indicated on the signs for each chemical application of 2,4-D, diquat dibromide, endothall, glyphosate, Komeen, Nautique, sodium carbonate peroxyhydrate, and triclopyr.

## **Section C. Reporting and Record Keeping**

### **1. Environmental Impacts**

The applicant is required to immediately contact the DEQ, Water Bureau, at 517-241-7734 if any fish or wildlife damage occurs in association with any chemical application.

### **2. Treatment Report**

A treatment report, on the approved DEQ form, must be returned postmarked no later than November 30 of the year this permit is in effect, even if treatment is not undertaken. Submit report to:

AQUATIC NUISANCE CONTROL AND REMEDIAL ACTION UNIT  
WATER BUREAU  
DEPARTMENT OF ENVIRONMENTAL QUALITY  
PO BOX 30273  
LANSING MI 48909-7773

### **3. Record Retention**

The applicant shall obtain and maintain written permission from each bottomland owner in the area of impact for 1 year from the expiration date of the permit, unless exempt under Section 324.3308 of Part 33. The records shall be made available to the DEQ upon request.

## **Section D. Liability**

### **1. Noncompliance**

Initiation of any work on the permitted project confirms the applicant's acceptance and agreement to comply with all terms and conditions of this permit. Noncompliance with these terms and conditions, and/or the initiation of other regulated activities not specifically authorized by this permit, shall be cause for the modification, suspension, or revocation of this permit, in whole or in part. Further, the DEQ may initiate criminal and/or civil proceedings to correct project deficiencies, protect public health and natural resource values, and secure compliance with statutes.

The issuance of this permit does not authorize violation of any federal, state or local laws or regulations, nor does it obviate the necessity of obtaining such permits, including any other DEQ permits, or approvals from other units of government as may be required by law.

### **2. Property Rights**

This permit does not convey property rights in either real estate or material, nor does it authorize any injury to private property or invasion of public or private rights.

### **3. Indemnification**

The applicant shall indemnify and hold harmless the State of Michigan and its departments, agencies, officials, employees, agents and representatives for any and all claims or causes of action arising from acts or omissions of the applicant, or employees, agents, or representatives of the applicant, undertaken in connection with this permit. This permit shall not be construed as an indemnity by the State of Michigan for the benefit of the applicant or any other person.

Steven E. Chester, Director  
Department of Environmental Quality

By: Richard M Hobla

Date: Feb. 8, 2007

Richard M. Hobla, Chief  
Aquatic Nuisance Control and Remedial Action Unit  
Water Bureau